Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of treating a person with symptoms of stroke, the method comprising

(a) determining that the person potentially has had a stroke based on observing one or more symptoms of stroke to make an initial diagnosis without determining the cause of the stroke; [[and]]

(b) administering to the person a composition comprising an amount of a pro-urokinase ("pro-UK") mutant M5 ($Lys^{300} \rightarrow$ His) polypeptide effective to lyse any potential blood clot causing the symptoms of stroke; and

(c) optionally, confirming the initial diagnosis with a diagnostic test to determine the cause of the stroke.

2. (Original) The method of claim 1, wherein the composition is administered more than 3 hours after the onset of symptoms.

3. (Original) The method of claim 1, wherein the composition is administered within 3 hours after the onset of symptoms.

4. (Original) The method of claim 1, wherein the composition is administered as a bolus of the composition comprising 20 - 50 mg of the pro-UK mutant M5 polypeptide.

5. (Original) The method of claim 1, further comprising obtaining a medical confirmation of an occlusive thrombus in the brain, and administering intravenously an infusion of the composition at a pro-UK mutant M5 polypeptide dosage of dose of 120 – 200 mg/hour.

6. (Original) The method of claim 1, further comprising obtaining a medical confirmation of an occlusive thrombus in the brain, and administering intra-arterially an infusion of the composition at a pro-UK mutant M5 polypeptide dosage of dose of 50 – 100 mg/hour.

7. (Withdrawn-currently amended) A method of treating a person with symptoms of a heart attack, the method comprising

(a) determining that the person potentially has had a heart attack based on symptoms of a heart attack to make an initial diagnosis without determining the cause of the heart attack;

(b) administering to the person a composition comprising an amount of a pro-urokinase ("pro-UK") mutant M5 ($Lys^{300} \rightarrow$ His) polypeptide effective to lyse any potential blood clot causing the symptoms of a heart attack; and

(c) optionally, confirming the initial diagnosis with a diagnostic test to determine the cause of the heart attack.

8. (Withdrawn) The method of claim 7, wherein the composition is administered within 90 minutes of the onset of symptoms.

9. (Withdrawn) The method of claim 7, wherein the composition is administered prior to angioplasty.

10. (Withdrawn) The method of claim 7, wherein the composition is administered as a bolus of the composition comprising 20 - 50 mg of the pro-UK mutant M5 polypeptide.

11. (Withdrawn) The method of claim 7, further comprising obtaining a medical confirmation of an occlusive thrombus in a coronary artery, and administering an infusion of the composition at a pro-UK mutant dosage of 50 - 200 mg/hour.

12. (Withdrawn) A method of lysing occlusive thrombi and emboli in a patient before, during, or after surgery, the method comprising administering to the patient within 5 hours before surgery, during surgery, or within 24 hours after surgery, a composition comprising an amount of a pro-urokinase ("pro-UK") mutant M5 ($Lys^{300} \rightarrow$ His) polypeptide effective to preferentially lyse any potential occlusive thrombus or embolus compared to hemostatic fibrin in wound sealing clots.

13. (Withdrawn) The method of claim 12, wherein the composition is administered by infusion within three hours before or after surgery.

14. (Withdrawn) The method of claim 12, wherein the composition is administered by infusion during surgery.

15. (Withdrawn) The method of claim 12, wherein the composition is administered by infusion at a pro-UK mutant M5 polypeptide dosage of 50 - 200 mg/hour.

16. (Withdrawn) A composition comprising an isolated, purified single-chain pro-urokinase ("pro-UK") mutant M5 ($Lys^{300} \rightarrow$ His) polypeptide, wherein at least 96% of the protein in the composition is the single-chain pro-UK mutant M5 polypeptide.

17. (Withdrawn) A composition of claim 16, wherein at least 98% of the protein in the composition is the single-chain pro-UK mutant M5 polypeptide.

18. (Withdrawn) The composition of claim 16, further comprising a pharmaceutically acceptable excipient.

19. (Withdrawn) A composition comprising an aliquot of 20 to 50 mg of a pro-UK mutant M5 ($Lys^{300} \rightarrow$ His) polypeptide, wherein at least 98% of the protein in the composition is the single-chain pro-UK mutant M5 polypeptide, packaged with directions for use in administering as a bolus or by infusion to a patient exhibiting symptoms of a stroke or a heart attack.